AMENDMENTS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1-13. Cancelled

14. (Previously presented) A method of screening a substance for use as pharmaceutical agents for the prophylaxis and/or treatment of a proliferative, invasive or cell migration disorder comprising assessing the affect of said substance on a GTPase-GTPase effector interaction.

15. (Previously presented) The method of claim 14, wherein the GTPase is of the Rab family.

16. (Previously presented) The method of claim 14, wherein the GTPase is Rab4, Rab5, Rab7, Rab11, Rab17, Rab18, or Rab22.

17. (Previously presented) The method of claim 14, wherein the disorder is selected from the group consisting of cancer, endometriosis, atherosclerosis, inflammatory disease, allergic disease, infectious diseases, diabetes, Alzheimer's disease, and skin repair disease.

18. (Previously presented) The method of claim 17, wherein the infectious disease is AIDS, tuberculosis, pseudotuberculosis, cholera, malaria, gastroenteritis, enteric fever, or typhus.

19. (Previously presented) The method of claim 17, wherein the infectious disease is caused by Mycobacterium, Staphylococcus, Toxoplasma, Trypanosoma, Listeria, Salmonella, Legionella, Leishmania, Coxiella, Shigella, Yersinia, Neisseria, Vibrio, or Bartonella

20. (Previously presented) The method of claim 17, wherein the infectious disease is caused by an infectious agent that infects cells by the endocytic route and resides intracellularly in phagosomes escaping the cellular killing mechanisms.

21. (Previously presented) The method of claim 17, wherein the cancer is a benign tumor, a malignant tumor, a carcinoma, a sarcoma, a melanoma, a leukemia, a glioma, or a neuroblastoma, in particular a lung carcinoma, an osteosarcoma, a lymphoma, a soft tissue sarcoma, a breast carcinoma, a bile cancer, a cervix carcinoma, a cancer of the (small) intestine, of the kidneys, of the cavity of the mouth, a penis carcinoma, an ovary cancer, a stomach cancer, a cancer of the tongue, a brain cancer, a bladder carcinoma, a prostate carcinoma, a liver carcinoma, a carcinoma of the pancreas, and every tumor that invades other tissues and organs distinct from its site of origin.

22. (Previously presented) The method of claim 14, wherein the assay is carried out in the presence of a labeled GTPase effector/regulator molecule.

23. (Previously presented) The method of claim 22, wherein the label is a fluorescent or radiactive label.

24. (Previously presented) The method of claim 14, wherein assessing comprises determining GTPase function.

25. (Previously presented) The method of claim 14, wherein assessing comprises determining GTPase interaction with a GTPase effector/regulator molecule.

26. (Previously presented) The method of claim 24, wherein GTPase function is determined by measuring GTP/GDP nucleotide exchange, GTP hydrolysis, endosomal motility, and endosomal trafficking.

27. (Previously presented) The method of claim 25, wherein a GTPase effector molecule is bound to a substrate.

28. (Previously presented) The method of claim 27, wherein the substrate is a chromatographic matrix or a bead.

29. (Previously presented) The method of claim 14, wherein the substance comprises one or more of the following functional groups: a halide atom bound to an alkyl, alkenyl, alkinyl or aryl residue, an alcohol group (primary, secondary, tertiary), an ether group, a carbonyl function (aldehyde or ketone), a carboxylic acid group, a carboxylic anhydride group, a carbamoyl group, a haloformyl group, a cyano group, an ester group including a lactone group, a benzyl, phenyl, tolyl, tosyl, sulfonyl group, an amino group (primary, secondary, tertiary), a sterol moiety, an isocyanate, a cyanate, a thioisocyanate, a thiocyanate, a carbamate, an azide, a diazo group, or a quinone group.

30. (Previously presented) The method of claim 14, wherein the substance is an organometallic compound, a β-hydroxy carboxylic acid, an inorganic acid or complex such as a metallocene, a nucleic acid.

31. (Currently amended) The method of claim [[30]]40, wherein the antibody is a polyclonal or monoclonal antibody, or a fragment thereof, a humanized or human antibody, an inhibitory or stimulatory antibody.

32. (Previously presented) The method of claim 14, wherein the substance is a protein or peptide.

33. (Previously presented) The method of claim 32, wherein the protein is a cytokine, a hormone, or an antibody.

34. (Previously presented) The method of claim 32, wherein the peptide is an oligopeptide comprising up to 20 amino acid residues

35. (Previously presented) The method of claim 34, wherein the oligopeptide is about 8, about 10 or about 12 amino acid residues in length.

36. (Previously presented) The method of claim 14, wherein the substance is a nucleic acid.

37. (Previously presented) The method of claim 36, wherein the nucleic acid is genomic DNA, cDNA, or mRNA, an oligonucleotide, or an oligoribonucleotide, wherein said nucleic acid encodes all or a fragment of a proteinaceous GTPase effector.

38. (Previously presented) The method of claim 37, wherein the encoding sequence is SEQ ID NO: 1, 3, 5, 7, 9, 11, 13, or and 15.

39. (Previously presented) The method of claim 37, wherein the nucleic acid further comprises a gene therapy vector.

40. (New) The method of claim 14, wherein the substance is an antibody.